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ABSTRACT

Funded under Title I of the Elementary and Secondary Education Act, the College Discovery and Development Program is a cooperative program developed and offered by the City University of New York and the Board of Education of New York City. This program provides remediation in reading and math to approximately 830 sophomores, Juniors and Seniors who are economically disadvantaged in three New York City high schools. Statistically significant results were found in both the reading and math components. Students were scheduled for intensive small group (8 to 10 students) individualized assistance in reading and math. Each center was staffed with three counselors, three educational assistants and one coordinator. Seventeen remedial reading and/or remedial math teachers staffed the program. There was one Project Coordinator who coordinated the program city wide. (Author)

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EVALUATION REPORT

Function No. 09-59610

College Discovery and Development Program

School Year 1974-75

Dr. Mildred Kaye

An evaluation of a New York City School district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1974-75 school year.

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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CHAPTER I

The Program

A. Background

The College Discovery and Development Program was initiated in 1965 by the Board of Education and the City University of New York to discover and develop the potential of ninth grade educationally and economically disadvantaged students who have been under-achievers through a special kind of program involving the benefit of intensive and long range support. The remedial reading and remedial mathematics components of the CDD Program were funded by Title I ESEA and were supplementary to services and instruction under city tax levy funds. In 1974-75 the program operated in three high schools, one in each of three boroughs: Theodore Roosevelt High School in the Bronx, Thomas Jefferson High School in Brooklyn, and Seward Park High School in Manhattan. The program was in operation from September 1974 through June 1975.

B. Objectives

The following objectives were stated in the project proposal:

1) As a result of participation in the reading component, the participants will show a statistically significant difference in their reading grade between their actual post-test and the anticipated post-test.

2) As a result of participation in the mathematics component, the participants will show a statistically significant difference in their mathematics grade between their actual post-test and anticipated post-test.

C. Enrollment

The CDD Program completed its tenth year of continuous implementation in June 1975. During this 1974-75 academic year there were three classes enrolled in the program: CDD VIII, admitted in September 1972, CDD IX, admitted in September 1973 and CDD X, admitted in September 1974. There were, in addition, a small number of students who had been admitted to the program prior to September 1972 but who had not yet completed their high school studies at the end of June 1974.

According to the project proposal, the total enrollment was to be 925 tenth, eleventh and twelfth grade students. The actual total enrollment was 830 (Spring figures). Table I presents the anticipated and actual enrollment at each grade level in each of the three participating high schools (June 1975).

D. Selection Procedures

As in former years, a joint effort was expended to recruit and select students for the program. Referrals of students were made through ninth year junior and senior high schools, guidance counselors and community action agencies. City University personnel screened the borough nomination applications in accordance with criteria established under Title I ESEA. After City University established an initial roster of eligible applicants, a panel of each center's staff reviewed the applications and selected and enrolled approximately 325 ninth year educationally and economically disadvantaged students from the initial roster. Students entered the program in the tenth year.

TABLE I

ANTICIPATED AND ACTUAL ENROLLMENT 1974-75

School	Grade Level	Anticipated	Actual
Seward Park	10	125	96
	11	100	88
	12	96	88
	Total	321	272
Roosevelt	10	125	114
	11	100	98
	12	101	94
	Total	326	306
Jefferson	10	100	84
	11	76	76
	12	102	92
	Total	278	252
TOTALS	10	350	294
	11	276	262
	12	299	274
	Total	925	830

Data obtained from coordinators Spring 1975.

E. Funding

The largest single source of funding for the three participating schools was a grant of the U. S. Office of Education to the Board of Education of the City of New York under Title I of the Elementary and Secondary Education Act. This grant, totalling $845,850 was utilized by the Board of Education almost entirely within the schools to pay for personal services of high school CDD staff, for equipment and materials. A small portion was used to commission an independent evaluation for the Title I CDD Program.

A second source of funds for the high school operations of CDD was in the regular operating budget of the Board of Education of the City of New York for the three host high schools. Although the special features of the Title I program were funded under Title I, the Board of Education had not been relieved of any of its normal responsibilities to CDD students. Thus, each high school continued to be allotted funds for CDD students on the same basis as all other students with a small additional allotment to maintain small classes.

F. Program Activities

The core of the program was individualized and small group instruction in remedial and/or corrective classes, reading and/or mathematics, in classes of 10 to 15 students. Pupils in the program attended a period (approximately 40 minutes) of supplementary reading instruction five times a week in addition to their regular English class. The reading program was designed to

assist students with word attack and comprehension skills involved in getting and interpreting the meaning of the printed page. The techniques used were to aid students increase their rate of reading outside the classroom.

Pupils in need of corrective and/or remedial mathematics were assigned to math classes five times a week for one period a day (approximately 40 minutes) in addition to their regular math class. The classes were designed to assist individual students overcome their basic skill deficiencies. Pupils participated in the regular school curriculum in addition to their participation in remedial reading, remedial math, or in some instances, both remedial classes.

Guidance was available to all students in the program on a one to one hundred ratio.

The students engaged in supportive cultural experiences in order to provide motivation and interest in academic skills.

Tutoring, according to the project proposal, was to be available to students when deemed necessary by their teachers, guidance counselors or self-initiated.

The degree to which project activities outlined in the project proposal were met is discussed in Chapter III, Findings.

CHAPTER II

Evaluation Procedures

All aspects of the evaluation design were prepared by the Office of Educational Evaluation in consultation with the Project Coordinator. The following evaluation objectives and procedures appear in the project proposal:

A. Evaluation Objective #1: To determine whether, as a result of participation in the Reading Component, the reading grades of the students will show a statistically significant difference between the real post-test scores and the anticipated post-test scores.

Subjects: All participants in the reading component.

Method and Procedures: The appropriate level of the Stanford Diagnostic Reading Test will be administered twice: During the first week of the program, and during the last week of the program.

Analysis of Data: Data will be analyzed by the 'Real (treatment) Post-test vs. Anticipated (without treatment) Post-test' design.

Time Schedule: Pre-test will be administered during the first week of the program, and post-test during the last week of the program.

The Stanford Diagnostic Reading Test was administered in November (pre-test). In order to allow ample time for test scoring and analysis, the post-test was administered early in May. The actual treatment time between pre- and post-test was, therefore, six months.

Level III of the SDRT, administered to eleventh and twelfth grade students, does not yield a grade level equivalent score. Percentile ranks were used to analyze data, by means of one group repeated measurement. The evaluator received permission from the OEE in January 1975 to change this aspect of the evaluation design.

B. Evaluation Objective #2: To determine whether, as a result of participation in the Corrective Mathematics Program, the mathematics grade of the students will show a statistically significant difference between the real post-test score and the anticipated post-test score.

Subjects: All participants in the mathematics component.

Method and Procedures: The appropriate form of the MAT Mathematics Test will be administered twice: During the first week of the program, and again during the last week of the program.

Analysis of Data: Data will be analyzed exactly as prescribed for Evaluation Objective #1 (above).

Time Schedule: Pre-test will be administered during the first week of the program, and post-test during the last week of the program.

It should be noted that delays in securing the Metropolitan Achievement Test delayed the administration of the pre-test until late October or early November.

The Final Report was due in the Office of Educational Evaluation on June 23, 1975. In order to allow ample time for test scoring and analysis, the post-test was administered early in May. The actual treatment time between pre- and post-test was, therefore, six months.

C. Evaluation Objective #3: To determine the extent to which the program, as actually carried out, coincided with the program as described in the Project Proposal.

It is important to note that the evaluator was limited to two full-day visits to each participating Center. One visit was made during the Fall semester, the other during the Spring semester.

CHAPTER III

Findings

A. Objective I - Reading

In adherence to the evaluation design specifications, the reading comprehension subtest of the Stanford Diagnostic Reading Test was administered to participating tenth (Level II), eleventh and twelfth (Level III) grade students on a pre-post test basis. The pre-test was administered early in November 1974 and machine scored. The post-test was administered in April 1975 and scored by the reading teachers.

Tenth year reading comprehension grade level scores were submitted by all three schools for analysis. Comparisons between predicted and actual post-test scores were computed as specified. The results are found in Table II. Test results were available for 247 students. This is 84.01 per cent of the total number of 294 participating students. Reasons for incomplete data were truancy (5 students, 1.70%), discharges from school (14 students, 4.76%) and lack of either pre- or post-test scores (28 students, 9.52%).

The actual mean gains between pre- and post-test ranged from .79 at Seward Park through .88 at Roosevelt to 1.32 at Jefferson. The actual mean gain between the predicted and actual post-test grade level scores for tenth year students was .53. The value of $t = 5.56$ for total tenth grade group was significant at greater than the .01 level.

TABLE II

MEAN READING GRADE LEVEL (SDRT-COMPREHENSION)FOR TENTH GRADE
PRE- PREDICTED AND ACTUAL POST-TEST

School	N_1*	N_2*	Mean			Standard Deviation			t-test (Pred-Act.Post)
			Pretest	Predicted Posttest	Actual Posttest	Pretest	Predicted Posttest	Actual Posttest	
Jefferson	84	73	6.81	7.18	8.13	1.81	2.05	2.08	
Roosevelt	114	90	6.64	7.16	7.52	1.73	1.78	1.79	
Seward Park	96	84	6.39	6.87	7.18	1.74	1.89	2.03	
TOTAL	294	247	6.61	7.06	7.59	1.75	1.88	1.97	5.56 (sign. $\leq$ .01)

N_1* = Total number of students in program (discharged, new admissions, etc.)
N_2* = Total number of students for whom data is available and complete

Level III of the reading comprehension subtest of the Stanford Diagnostic Reading Test does not yield grade equivalent scores. Eleventh and twelfth year percentile ranks were submitted for analysis. Pre-post test analysis (one group repeated measurement design) results are found in Tables III and IV. Test results were available for 175 eleventh year students (76.42 per cent of the total eleventh year participants) and 158 twelfth year students (75.60 per cent of twelfth year students). Eleventh year missing data were due to 12 discharges (5.24%) and 42 without either pre- or post-test scores (18.34%). Reasons for missing twelfth year data were 11 graduated (5.26%), 8 discharged (3.82%) and 32 without pre- or post-test scores (15.31%).

The mean gain of 3.53 percentile ranks for the 175 eleventh year students was significant at greater than the .01 level. This in spite of the fact that one school showed a loss of 1.70 in mean percentile rank from pre- to post-testing.

The mean gain of 2.04 percentile ranks for the total 158 twelfth year students was not statistically significant (t=1.62).

The reader is cautioned to keep in mind that a diagnostic test, a test designed for instructional purposes not as an achievement measure, was used to measure achievement in reading comprehension. In addition, only 5 months passed between pre- and post testing.

B. Objective II - Mathematics

In adherence to the evaluation design specifications the Metropolitan Achievement Test in Mathematics was administered

TABLE III

MEAN READING PERCENTILES (SDRT-COMPREHENSION) FOR ELEVENTH GRADE
PRE- AND POST-TEST

School	N_1*	N_2*	Mean		Actual Mean Gain (Pre-Post)	Standard Deviation		t-test
			Pretest	Posttest		Pretest	Posttest	
Jefferson	76	62	28.26	35.09	6.83	16.93	22.84	
Roosevelt	98	76	32.53	30.83	-1.70	18.67	19.21	
Seward Park	55	37	24.00	32.70	8.70	10.16	12.49	
TOTAL	229	175	29.21	32.74	3.53	16.91	19.94	3.75 (sign. ≤ .01

N_1* = Total number of students in program (discharged, new admissions, etc.)
N_2* = Total number of students for whom data is available and complete

TABLE IV

MEAN READING PERCENTILES (SDRT-COMPREHENSION) FOR TWELFTH GRADE
PRE- AND POST-TEST

School	N_1*	N_2*	Mean		Actual Mean Gain (Pre-Post)	Standard Deviation		t-test
			Pretest	Posttest		Pretest	Posttest	
Jefferson	92	71	37.58	38.10	.52	21.73	33.93	
Roosevelt	94	73	41.89	44.31	2.43	20.78	22.47	
Seward Park**	23	14	24.93	32.57	7.64	10.71	8.29	
Total	209	158	38.45	40.49	2.04	19.41	22.03	1.62ns

N_1* = Total number of students in Title I program

N_2* = Total number of students for whom data is available and complete

** School reported only students who received remedial reading instruction

on a pre-post test basis to all students who received remedial mathematics instruction. Not as many CDD students participated in remedial math classes as in remedial reading.

The pre-test was administered in November 1974. The post-test in April 1975.

Pre-post test data was available for 219 tenth year students, 99 eleventh and twelfth year students. The total of 318 is equivalent to 73.61 per cent of all students in remedial math classes.

Data was analyzed by means of predicted post-test analysis. Tables V and VI present data for math component of CDD program.

Tenth year students in the math component did achieve significant gains (predicted actual post t value = 4.04). For eleventh year students there was a small loss noted between predicted and actual post-test, it was not large enough to be statistically significant.

The reader is again cautioned to keep in mind that only 5 months passed between pre- and post-tests. Perhaps if the time had been longer, more significant results would have been exhibited. More important, however, is that some 30 students' pre-test score was 9.9, the highest score the test is designed to report. These students could not be included in the data analysis because there was no possibility of any growth. There is no way of knowing, grade level wide, how much better they were doing in April than in November.

TABLE V

MEAN MATH GRADE LEVEL (MAT) FOR TENTH GRADE
PRE- PREDICTED AND ACTUAL POST-TEST

School	N_1*	N_2*	Mean			Standard Deviation			t-test (Pred-Act.Post)
			Pretest	Predicted Posttest	Actual Posttest	Pretest	Predicted Posttest	Actual Posttest	
Jefferson	84	61	7.19	7.69	8.29	1.41	1.49	1.30	
Roosevelt	114	90	7.35	7.85	8.46	1.38	1.41	1.17	
Seward Park	88	68	7.02	7.67	8.05	1.38	1.18	1.23	
Total	286	219	7.21	7.74	8.28	1.38	1.38	1.22	4.04 (sign. ≤ .01)

N_1* = Total number of students in Math program (discharged, new admissions, etc.)
N_2* = Total number of students for whom data is available and complete

TABLE VI

MEAN MATH GRADE LEVEL (MAT) FOR ELEVENTH AND TWELFTH GRADE
PRE- PREDICTED AND ACTUAL POST-TEST

School	N_1*	N_2*	Mean			Standard Deviation			t-test
			Pretest	Predicted Posttest	Actual Posttest	Pretest	Predicted Posttest	Actual Posttest	(Pred-Act.Post)
Jefferson	42	27	7.99	8.53	8.03	1.03	1.03	.67	
Roosevelt	58	53	8.46	8.91	9.02	1.78	1.11	.69	
Seward Park	31	10	7.44	7.98	8.33	.97	1.05	1.10	
Seward Park	15	9 (Grde 12)	8.11	8.59	8.45	1.13	1.14	1.11	
Total	146	99	8.19	8.68	8.63	1.15	1.12	1.03	.60n.s.

N_1* = Total number of students in Math program (discharged, new admissions, etc.)
N_2* = Total number of students in program for whom data is available and complete

C. Objective III - Program Implementation

1) Physical Facilities

The physical facilities in each of the three Title I host schools were adequate. Small group instruction, most often, was conducted in regular school classrooms. The rooms were airy and well lit. Closet space for storage purposes was quite sufficient. Office space for staff was adequate in only one Center, Jefferson High School.

2) Student Enrollment

The program serviced the needs of the specific target population for which it was designed.

3) Materials

A variety of reading and mathmatics materials were used in the CDD program. In addition to teacher-made materials and several word games, the following is a partial list of available materials:

Reading Materials:
Shostak-Vocabulary Workshops
Bromberg-1100 Words You Need to Know
Gilbert-Breaking the Reading Barrier
Smith-Be a Better Reader
SRA Kits-Dimensions in Reading
SRA-Reading for Understanding
Barnell-Lofts-Specific Skills Series
Grobers-Reading Attainment System
New York Times

Mathematics Materials:
Learning to Compute
New Look at Fractions
New Look at Percentages
Foley-Individualizing Math
Johnson-Applications in Math
Cross-Number Puzzles
McCormack Mathers Materials
Random House Kits
Rassmussen-Key to Algebra

4) Project Coordinator

The Project Coordinator, an assistant director, was responsible to the Division of High Schools, Central Board of Education. Her duties included the administration and coordination of the entire high school CDD program. She worked closely with the Center Coordinators, visited the high school centers on a regular basis, planned and implemented staff training, and analyzed needs and prepared budgets for the total program, disseminated information in collaboration with the City University CDD Program Director, approved and forwarded for processing school requisitions and reimbursable purchase orders for each center and worked in cooperation with the evaluation consultant.

The Project Coordinator had been with CDD for several years. She was thoroughly familiar with all aspects of the program and one of its staunch supporters.

5) Center Coordinators

The Center Coordinators were teachers of remedial reading or remedial mathematics. They were selected for their expertise as teachers and their understanding of the objectives and the thrust of the program. In addition to teaching one class of remedial reading or math, the three Title I CDD Center Coordinators were responsible for the program operation within their respective schools. They coordinated the CDD

program, organized and supervised testing programs, prepared reimbursable purchase orders, inventories, needs assessments, worked closely with the Project Coordinator, chairpersons of academic departments within their schools and consulted with the project evaluator.

Unfortunately, the Center Coordinators in Jefferson and Seward Park High Schools were reassigned to other school responsibilities mid-way through the academic year. They were replaced by dedicated but less experienced (as far as CDD is concerned) personnel. It is to the credit of both new coordinators that they were able to learn and perform the tasks of CDD coordinators so quickly and efficiently.

The Center Coordinator in Roosevelt High School remained with the program the entire school year. When she started in September, she too was a novice to CDD. She learned quickly, performed conscientiously and met all her responsibilities. The program would benefit if she remained as coordinator next year.

6) Remedial Reading and Remedial Mathematics Teachers

The project proposal specified a CDD remedial teaching staff of seventeen, eleven teachers of reading and six teachers of mathematics. The Centers at Roosevelt and Jefferson High Schools were to have four teachers of remedial and/or corrective reading and two teachers of remedial and/or corrective math. The Center at Seward Park High School was to have three teachers of remedial and/or corrective reading and

two teachers of remedial and/or corrective math. (These figures include the Center Coordinators.) Each teacher was to teach twenty-five full periods of CDD remedial reading or math.

Seward Park and Jefferson High Schools implemented the program proposal as written. At Roosevelt High School, teachers (eleven reading and four math) taught remedial classes of CDD students and also taught regular mainstream classes during the first half of the school year. Starting in February, remedial reading and math teachers at Roosevelt were assigned to CDD exclusively with CDD students.

The teachers in the CDD program were selected by and responsible to their respective department chairperson, not to the CDD Center Coordinator. Communication between CDD Center Coordinators and department chairpersons was good throughout the school year.

The major role of all remedial teachers was to instruct small groups of students, to adapt techniques, syllabi, curriculum materials, etc. to individual needs of students who were deficient in basic skills.

Two teachers told the evaluator that they preferred teaching in the CDD program because instructional groups were small, no more than 15 students. They said the CDD assignments were "plums" in the total school picture. Three teachers commented that they were not familiar with the CDD program when initially assigned, but once a part of the

program, they thought it to be a good way to help academically disadvantaged youngsters. Only one teacher told the evaluator that although her students worked hard she preferred to teach "brighter" students.

The quality of instruction varied from teacher to teacher. In one observed class the teacher handed out commercially prepared reading lessons and waited for the pupils to report "test scores" at the end of each lesson. In another reading class, the teacher and pupils read a playlet together. The students were interested in the lesson. The teacher was an active participant and instructor. New words were defined and discussed, questions were raised and answered.

In math, although the students were working independently in class, the teacher worked with individual pupils. He clarified troublesome problems and encouraged the students to try more difficult problems. Teaching and learning were observed.

The majority of the teachers were enthusiastic about being part of the program. Most were dedicated, creative, responsive to pupils needs. The math teachers were especially creative in reaching their students and are to be complimented. The teachers deserve the support of their administration.

At this point, the evaluator reminds the readers that only two days were spent in each CDD Center, one in the Fall

and the other in the Spring. A portion of the time in each school was spent interviewing the coordinators, counselors and other staff. Only a few hours of classroom observation in each Center were possible. (Restriction placed in evaluation assignment by the central board.)

7) Guidance Counselors

Nine guidance counselors, three in each Center, were assigned to the program. As in past years, the student-counselor ratio was approximately 100 students to one counselor. Each counselor was assigned to work with students at one particular grade level, tenth, eleventh or twelfth.

Among their varied responsibilities, the guidance counselors were responsible for assessment and continuous review of each student's progress in reading and/or math, provision of continuous individual and group counseling to students in order to reduce anxiety, improve self-image, improve attendance and motivation and effect attitudinal change toward reading and/or math and school in general. In addition, they made referrals when necessary, worked with parents and worked closely with teachers.

In the evaluator's opinion, the counseling component of the CDD program was one of the most positive aspects of the program. It is in this component of the program that the students get the support and encouragement that they so often need. Future evaluations should attempt to objectively measure the effect of counseling on students in the CDD program.

Unfortunately, several counselors transferred in and out of the program this year. Nevertheless, newly appointed counselors, as their more experienced colleagues, always had an open door for their students. The counselors were all qualified and dedicated professionals.

8) Educational Assistants

Three Educational Assistants were assigned to each school Center. They assisted the teachers in the performance of their duties and helped individual students in remedial reading and/or remedial math. They received their instruction from the teachers with whom they worked and were supervised by the school's Center Coordinator.

9) Tutors

The numbers of tutors differed at different times of the school year. It was apparent that availability, scheduling, training, space, and supervision of tutors were all less than adequate during the school year. Perhaps the inclusion of this component should be reassessed.

10) School Secretaries

During the first half of the school year each Center had the services of a full-time school secretary who was responsible for all clerical work attached to her office. At Seward Park High School the secretarial services were reduced to two hours per day, quite inadequate for the work load of the office.

11) Cultural Activies

An important part of the CDP program, included in the project proposal, was the cultural activities made available to the students. This year students had an opportunity to visit college campuses, businesses and industry. They saw such shows as:

The Wiz	First Breeze of Summer
Goodtime Charlie	2001 - Space Odyssey
Dr. Zhivago	Raisin
Pete Seeger Film	Romeo and Juliet (Stratford)
Pearlie Victorious	Pippin
	Marcel Marceau

12) Disposition of 1973-74 Recommendations

Recommendation	1974-75 Action
1. That the program be continued because of the significant gains made by the students in corrective reading and math.	1. The program was recycled.
2. That the ratio of one teacher to nine or ten students be started early in the program so that all students could receive the intensive help in corrective reading and math.	2. The average daily attendance was 8-10 students. The program began operation in September 1974.
3. That the reading test selected serve as a diagnostic tool for teachers. The CAT used in the evaluation identifies overall general areas of weakness rather than specific areas.	3. The Stanford Diagnostic Reading Test was used for evaluation purposes.
4. That students having similar educational needs be grouped together early in the academic year.	4. Test results were used early in the year for grouping and instructional purposes.
5. That pretesting be done in late September or early October so that the maximum effect of the treatment can be assessed.	5. Late official approval and funding delayed purchase and administration of pretest until November.

CHAPTER IV

Discussions and Recommendations

A. Discussion of Findings

The College Discovery and Development Program continued on into its tenth year with a total of 830 students in 1974-75. The tenth graduating class completed their high school education. In addition to their acceptance to branches of the City University of New York, the list of private school acceptance is impressive.

The Title I component of the program functioned in three of the five CDD high school centers, Seward Park in Manhattan, Theodore Roosevelt in the Bronx, and Thomas Jefferson in Brooklyn.

On the basis of direct observation, intensive interviews with staff and objective test data, the following strengths and weaknesses emanate from the program.

First, class size adhered to the project proposal allowing teachers to reach their pupils easily and efficiently. Attempts were made, although not one hundred per cent successful, to recruit the "right teachers" for the CDD program. Unfortunately, changes in staff (coordinators, counselors and teachers) were rather large in number this year.

Secondly, the guidance aspects of the program were a decided strength. The counselors used multi-faceted approaches to individual and group counseling sessions. An "open door" approach was utilized during the entire school year.

Eighth, space was at a premium, especially for counselors and coordinators in Roosevelt and Seward Park High Schools. Needless to day, the schools are hard pressed for space but some consideration for inadequate CDD office space would be helpful.

B. Recommendations

The recommendations that follow are directed toward selected aspects of the program, improvement of which, it is believed, can only strengthen the CDD Program.

1) Adequate secretarial help should be provided (one full-time secretary at each Center).

2) CDD remedial class registers should not exceed 10 students.

3) Adequate office space should be provided at each Center.

4) Continuance of on-going inservice training, especially for new personnel, is recommended.

5) Funding approval by City and State agencies must be secured earlier so that all aspects of the program can begin in September.

6) Reappraisal of tutorial program inclusion is recommended.

7) In spite of some problem areas and because of the many positive aspects of the CDD Program the College Discovery and Development Program has proven its worth. The evaluator recommends it for recycling.

CHAPTER V

Exemplary Program Abstract

Component Code	Activity Code	Objective Code
60816	720	801
60916	720	801

A. Component Abstract

The College Discovery and Development Program is a cooperative program developed and offered by the City University of New York and the Board of Education of New York City. This program provides remediation in reading and math to approximately 830 Sophomores, Juniors and Seniors who are economically disadvantaged in three New York City high schools.

Statistically significant results were found in both the reading and math components. Students were scheduled for intensive small group (8 to 10 students) individualized assistance in reading and math.

Each center was staffed with three counselors, three educational assistants and one coordinator. Seventeen remedial reading and/or remedial math teachers staffed the program. There was one Project Coordinator who coordinated the program city wide. (Author)

Use Table 30A, for Historical Regression Design (6-Step Formula) for Reading (English); Math (English); Reading (Non-English); Math (Non-English).

30A. Standardized Test Results.

In the Table below, enter the requested information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. This form requires means obtained from scores in the form of grade equivalent units as processed by the 6 step formula (see District Evaluator's Handbook of Selected Evaluation Procedures, p. 45-49). Before completing this table, read all footnotes. Attach additional sheets if necessary. [49]

Component Code	Activity Code	Test Used[1]	Form Pre	Form Post	Level Pre	Level Post	Total N[2]	Group I.D.[3]	Number Tested[4]	Pretest Date	Pretest Mean	Predicted Posttest Mean	Actual Posttest Date	Actual Posttest Mean	Statistical Data Obtained Value of t	Statistical Data Level[5] of significance
60816	720	sdrt	W	X	2	2	294	10	247	11/74	6.61	7.06	4/75	7.59	5.56	p≤.01
60916	720	mat	G	H	Advan.		286	10	219	11/74	7.21	7.74	4/75	8.28	4.04	p≤.01
60916	720	mat	G	H	Advan.		146	11	99	11/74	8.19	8.68	4/75	8.63	.60	ns

1/ Identify test by name and year of publication (CAT-58, CAT-70, etc.).
2/ Total number of participants in the activity.
3/ Identify participants by specific grade level (e.g., grade 3, grade 5). Where several grades are combined, enter the last two digits of the component code.
4/ Total number of participants included in the pre and posttest calculations.
5/ Specify level of statistical significance obtained (e.g., p ≤ .05; p ≤ .01).

Use Table 30C. for norm referenced achievement data not applicable to tables 30A. and 30B.

30C. Standardized Test Results

In the table below, enter the requested information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. Before completing this form, read all footnotes. Attach additional sheets if necessary.

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Component Code	Activity Code	Test Used[1]	Form		Level		Total N[2]	Group ID[3]	Number Tested		Pretest			Posttest			Statistical Data		
			Pre	Post	Pre	Post			N[4]	Score Type[5]	Date	Mean	SD[6]	Date	Mean	SD[6]	Test[7]	Value[8]	Level[9]
6081672 0		sdrt	W	X	3	3	229	11	175	2	11/74	29	16	4/75	33	19	$\bar{z}$	3.75	p≤.01
6081672 0		sdrt	W	X	3	3	209	12	158	2	11/74	38	19	4/75	40	22	$\bar{z}$	1.62	n.s.

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1/ Name of Test Used and Year of Publication (MAT-58; CAT-70, etc.)

2/ Total number of participants in the activity

3/ Identify the participants by specific grade level (e.g., grade 3, grade 5). Where several grades are combined, enter the last two digits of the component code.

4/ Total number of participants included in the pre and post test calculations.

5/ 1 = grade equivalent; 2 = percentile rank; 3 = Z Score; 4 = Standard score (publisher's); 5 = stanine; 6 = raw score; 7 = other.

6/ S.D. = Standard Deviation

7/ Test statistic (e.g., t; F; χ^2).

8/ Obtained value

9/ Specify level of statistical significance obtained (e.g., p≤.05; p≤.01).

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College Discovery and Development Program

DATA LOSS FORM -- ATTACH TO MIR (Item #30)

District # _____ Function # 09-59610 Funding Source Title I Date July 1975

Directions: In this Table enter all Data Loss information. Between MIR, Item #30 and this form, all participants in each activity must be accounted for. The component and activity code used in completion of Item #30 should be used here so that the data in the two Tables match. See definitions below this Table for further instructions.

Component Code					Activity Code			(1) Group I. D.	(2) Test Used	(3) Total N	(4) Number Tested/ Analyzed	Participants Not Tested/ Analyzed		Reasons why students were not tested, or if tested, were not analyzed	Number/Reason
												N	%		
6	0	8	1	6	7	2	0	11	sdrt	229	175	54	23.6	Discharged (12) No pre- or post test (42)	
6	0	8	1	6	7	2	0	12	sdrt	209	158	51	24.4	Graduated (11) Discharge (8) No pre- or post test (32)	
6	0	8	1	6	7	2	0	10	sdrt	294	247	47	15.9	Truancy (5) Discharge (14) No pre- or post test (28)	
6	0	9	1	6	7	2	0	10	mat	286	219	67	23.4	Discharge (14) Truant (5) No pre or post (36) Pre-test ceiling (12)	
6	0	9	1	6	7	2	0	16	mat	146	99	47	32.3	Graduated (7) Discharge (8) No pre or post (13) Pre-test ceiling (13)	

(1) Identify the participants by specific grade level (e.g., grade 3, grade 9). Where several grades are combined, enter the last two digits of the component code.
(2) Identify the test used and year of publication (MAT-70, SDAT-74, etc.)
(3) Number of participants in the activity.
(4) Number of participants included in the pre-and post-test calculations found on Item #30.
(5) Number and percent of participants not tested and/or not analyzed on item #30.
(6) Specify all reasons why students were not tested and/or analyzed. For each reason specified, provide a separate number count. If any further documentation is available, please attach to this form. If further space is needed to specify and explain data loss, attach additional pages to this form.